

Work Order ID 158731

158731

Page 1

Thursday, March 30, 2017 10:37:13 AM

Item ID: D412-724-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Head Rest Assembly, Center
Start Date: 3/30/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 4/11/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: SCHEDULED

Approvals: Process Plan: **DAS 21 9-89** Date: **MAR 30 2017** Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
N/A	Rev N/A	DAS 6 9-89							
100	Document Control	0.00							
100	DOCUMENT CONTROL					DAS 27 9-89			C.B. / DAS 21 9-89 17-03-31 (2)
DC	Memo	0.00							
Doc.Control -USB or Paperwork	If D412-724-041 is a W/O on it's own, Photocopy bluefile and create labels per PPP D412-724-041 CHG001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.06							
Quality Control									

MAR 31 2017

Z

DAS 6 9-89 MAR 30 2017 DAS 28 9-89

DAS 27 9-89 MAR 31 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____						
Misidentified	☐	Past Due	☐							

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Page 2

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Start Date: 3/30/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 4/11/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: SCHEDULED

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-724-041 Location : FG017								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.20							
Quality Control									

Handwritten notes: **PPP 158731**, **PPP 158731**, **smB**, **17/3/31**

Stamp: **DAS 21 9-89 APR 03 2017**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Misabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Thursday, March 30, 2017 10:37:17 AM

Page 1

Work Order ID: 158731

158731

Parent Item: D412-724-041

D412-724-041

Parent Item Name: Head Rest Assembly, Center

Start Date: 3/30/2017

Required Date: 4/11/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A04.09.08New IssueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN525-10R6

Purchased

No

120

Each

156.0000

4

8

AN525-10R6

Screw

Location

Loc Qty

Loc Code

ST329

156

M134502

156

D3303-041

Manufactured

No

120

Each

7.0000

1

2

D3303-041

Head Rest

Location

Loc Qty

Loc Code

ST457

7

158123

7

D3304-041

Manufactured

No

120

Each

3.0000

1

2

D3304-041

Tube Assembly

Location

Loc Qty

Loc Code

ST458

3

144764

3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐						OTHER : _____	

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Revision ID:					Stop	*NS2*
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Start Date:	3/30/2017	Start Qty:	2.00	Cust Item ID:		
Required Date:	4/11/2017	Req'd Qty:	2.00	Customer:		
Reference:	SCHEDULED					
Approvals:	Process Plan:	Date:	MAR 30 2017	Tooling:	Date:	
	QC:	Date:		SPC (Y/N):	Date:	
					Run	Start
						NR1
					Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
N/A	Rev N/A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	If D412-724-041 is a W/O on it's own, Photocopy bluefile and create labels per PPP D412-724-041 CHG001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.06							
Quality Control									

CB MAR 30 2017 2

DAS
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4. WEIGHT AND BALANCE

The following is the weight increase associated with the D412-769-XXX Kits. The installer is responsible for the weight of the equipment coming out of the helicopter in order to install the D412-769-XXX Aft Facing Seat kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-769-011 Aft Facing Seat kit	60.0 lb 27.2 kg	0.0 in 0.0 m	0.00 in-lb 0.00 m-kg	87.0 in 2.21 m	5220 in-lb 60.11 m-kg
D412-769-041 Aft Facing Seat, LH (normal position)	30.0 lb 13.6 kg	-16.1 in -0.41 m	-483.0 in-lb -5.58 m-kg	87.0 in 2.21 m	2610 in-lb 30.06 m-kg
D412-769-042 Aft Facing Seat, RH (normal position)	30.0 lb 13.6 kg	+16.1 in +0.41 m	+483.0 in-lb +5.58 m-kg	87.0 in 2.21 m	2610 in-lb 30.06 m-kg
D412-769-041 Aft Facing Seat, LH (center position)	30.0 lb 13.6 kg	-1.1 in -0.03 m	-33.0 in-lb -0.41 m-kg	87.0 in 2.21 m	2610 in-lb 30.06 m-kg
D412-769-042 Aft Facing Seat, RH (center position)	30.0 lb 13.6 kg	+1.1 in +0.03 m	+33.0 in-lb +0.41 m-kg	87.0 in 2.21 m	2610 in-lb 30.06 m-kg
D412-769-041 Aft Facing Seat, LH (right Position)	30.0 lb 13.6 kg	+13.9 in +0.35 m	+417.0 in-lb +4.76 m-kg	87.0 in 2.21 m	2610 in-lb 30.06 m-kg
D412-769-042 Aft Facing Seat, RH (left Position)	30.0 lb 13.6 kg	-13.9 in -0.35 m	-417.0 in-lb -4.76 m-kg	87.0 in 2.21 m	2610 in-lb 30.06 m-kg

5. PARTS LIST

Qty -011	Qty -041	Qty -042	Part Number	Description
X			D412-769-011	AFT FACING SEAT KIT
1	X		D412-769-041	AFT FACING SEAT, LH
1		X	D412-769-042	AFT FACING SEAT, RH
	1		D412-769-043	AFT FACING SEAT ASSEMBLY, LH
		1	D412-769-044	AFT FACING SEAT ASSEMBLY, RH
	1	1	D412-724-041	HEAD REST ASSEMBLY, CENTER
	1		D412-724-043	HEAD REST ASSEMBLY, LH
		1	D412-724-044	HEAD REST ASSEMBLY, RH